

Appendix E

Wildlife Species in Redmond Town Center Open Space and Marymoor Park

Norman Wildlife Consulting

June 2004

Supplemental Information on Wildlife Species Occurring in the Redmond Town Center Area

There are two primary habitats of concern in the Bear Creek Parkway Extension project, the open space with the storm water ponds for the Redmond Town Center Mall (RTC) and the coniferous forest that is surrounded by downtown Redmond. Though isolated from Marymoor Park by SR 520, the increased restoration activity on Bear Creek provides a good corridor for the many Puget Sound Lowland species to have access to these sites. The ponds serve as water quality treatment facilities and another large pond to the west of the Sammamish River was likely created for the SR 520 overpass. These ponds provide some refuge from the increasing recreational disturbance at Marymoor Park. It is very likely that these ponds were not created with wildlife habitat in mind, but it is clear from the surveys below that they are a focal point for many species. It is also not clear how much impact boating recreation on the Sammamish River causes species using the river to be disturbed and thus rest on these ponds until the disturbance passes.

Bird Species Occurring in the Redmond Town Center Area

This annotated list of bird species is based upon species observed visiting the Redmond Town Center (RTC) Great Blue Heron colony and also observed during surveys performed for the University of Washington Urban Ecology Project in the spring and early summer of 2004. The data also includes visits by Donald Norman (DMN) from field notes starting in 2003 and includes species expected to be using the forested area of the colony and the adjacent open space area. Because multiple trips and extensive observations are necessary to observe all species at a site, this list also includes the probable and possible species using the site. This information comes from an understanding of bird behavior and habitat use, as well as the excellent compilation of information in *Birds of King County* by Gene Hunn (1982, Seattle Audubon Society) and the recently published *Breeding Bird Atlas* (BBA, Smith et al., 1997).

The *Breeding Bird Atlas* divided up the state into 9 square mile blocks based upon TRS blocks. Local birders surveyed the blocks, visited each habitat type during the breeding season and documenting breeding birds into categories of possible (essentially occurring in the habitat in the summer) to probable (i.e. singing) and finally confirmed nesting (nest found, carrying food, etc.). The close Marymoor Park provide good comparable information on the birds of the RTC Open Space.

A primary source of information for the abundance of species in the area comes from the weekly birding by Michael Hobbs (personal communication, hereafter MH) (email: hummer@isomedia.com) at Marymoor Park (MP). Over 150 species have been observed in over 500 visits since 1990. These species form the basis of the total list for the site and those breeding are indicated by a MP*. Abundance is based upon the frequency of occurrence (not total numbers of individuals) on the weekly visits, using the following Frequency Codes:

- Abundant or Always, seen on more than 90% of visits
- Common - seen on greater than 33% of visits (but less than 90%)
- Uncommon - seen on 20% to 33%
- Occasional - seen more than twice monthly, but less than 20%
- Rare - seen once or twice.

Detailed information on the number of occurrences by week, which have ranged from 7 to 12 visits over the past 14 years, provide the basis for the monthly frequency (www.scn.org/fomp/birdsbyweek.htm). Hobbs has also provided information about the ponds near 48th St. that are in the western edge of the park. Matryn Stewart (MS) of the East Lake Washington Audubon has also provided observation data. Stewart visited the site, focusing upon the RTC Open Space, on 13 dates (12/20/03; 1/2/04; 1/4/04; 1/17/04; 1/25/04; 2/1/04; 2/6/04; 2/12/04; 2/15/04; 3/14/04; 3/28/04; 4/4/04; 4/6/04; 4/11/04; 5/2/04; 5/16/04).

A total of 65 (45 by DMN) species have been observed in the Safeco Forest containing the heron colony and the RTC Open Space (RTC hereafter). Observed species are indicated in **BOLD**, with species that are confirmed breeders with an *; those that probably or possibly breed, but have not been detected are listed with a *?. Those species that have not been documented, but probably occur or will occur are designated in *Italic*, totally an additional 32 species on the site. At least 18 species breed but an additional 29 probably or possibly breed on the site on a regular basis. Few breeding surveys have been performed. Other species listed include explanations as to why they probably do not occur at the site, such as species associated with the surrounded developed areas, particularly Marymoor Park.

Pied-billed Grebe MP* *Podilymbus podiceps*

This species can occur on small open water areas, has bred at Green Lake (BBA Smith et al., 1997). The ponds in the open space west of Redmond Town Center mall (RTC) are small, but up to 2 grebes were seen on the ponds west of the RTC on 6 occasions, until mid March 2004 (MS). It has not been determined if they are too small for grebes to breed there.

Horned Grebe *Podiceps auritus*

Western Grebe *Aechmophorus occidentalis* **State Candidate Species**

These species occur at Marymoor Park in the fall on the north end of Lake Sammamish and into the winter, but are not expected on the small ponds west of the RTC. The Western Grebe is common in late fall. The Western Grebe is a State Candidate Species.

Double-crested Cormorant *Phalacrocorax auritus*

This species is observed as a flyover along the Sammamish River, as well as a roost just south of Leary Way (MH). It is unlikely to use storm water ponds as they are probably too shallow, but could roost on the site in some of the tall trees. While historically occurring in the winter months, there are more and more sightings into the summer, especially related to the release of salmonids.

Great Blue Heron * *Ardea herodias* **State PHS Species**

Hérons have bred in the Douglas firs north of the RTC since 1997. Numbers have ranged from several nests to over 20 reported in 2000. Herons were seen in the area west of the RTC through out the winter and spring, up to 2 birds in the winter, but up to 14 birds in early May 2004 (MS).

Green-backed Heron *? MP* *Butorides virescens*

This small and secretive heron is an uncommon breeder in King County and is likely to breed in Sammamish River, but no confirmed nests have been noted. Was seen spring 2004 at RTC.

American Bittern

Botaurus lentiginosus

Bitterns require extensive wetland vegetation, typically grasses, for cover and nesting. They are a rare breeder in the area, with only a few locations in King County (BBA Smith et al., 1997). As a migrant, the most likely time of occurrence would be April or August.

Canada Goose *? MP*

Branta canadensis

This semidomesticated species is present on almost every body of water in the Puget Sound Lowlands and has been seen flying over the site and is expected to nest at the site due to its dense vegetation and open water. Retaining grass at a higher level discourages the geese.

*Wood Duck MP**

Aix sponsa

Wood ducks breed in forested wetlands and there are confirmed breeding records for King County (BBA Smith et al., 1997). At least 3-5 clutches of wood ducks have been documented at MP (MH) but only two boxes for nesting are present. Boxes should be added in the areas with more ponds part of a successful master plan for the Sammamish River.

American Widgeon

Anas americana

This common migrant and wintering duck species frequently uses grassy areas to forage, but also is capable of flying the distance to Lake Sammamish to roost. Seen on 7 occasions in the winter on the ponds west of RTC, up to 8 birds (MS) as well as at MW (MH).

Gadwall * MP*

Anas strepera

This common migrant and wintering duck species has also a common summer breeding species over the past 40 years (Hunn 1982) and likely to be breeding in the ponds by the Sammamish River. A pair was seen on 27 May 2004 on the ponds west of RTC.

Common Teal (Green-winged Teal) *Anas crecca*

This common migrant and wintering duck species in the Puget Sound Lowlands uses more marine wetlands but is common in the winter in Marymoor Park (MH). I was only observed on one occasion on the ponds west of RTC when 6 were seen in January 2004 (MS), but occurs frequently at the Rowing Club ponds at MP (MH).

Mallard *? MP*

Anas platyrhynchos

A common breeding resident, almost a domesticated duck in many locations. Males were seen on 27 May on the ponds west of RTC (DMN) as well as on almost all of the winter and spring surveys (MS, up to 6 birds).

Northern Shoveler

Anas clypeata

This common migrant and wintering duck species in the Puget Sound Lowlands uses open wetlands but has could occurred on the ponds west of the RTC Mall in the winter on 6 occasions (MS up to 2 birds).

Blue-winged Teal

Anas discors

This common migrant and rare winter duck species is an uncommon breeder in the Puget Sound Lowlands (Hunn 1982, BBA Smith et al., 1997) and uses open wetlands and could occur on the ponds west of the RTC Mall.

Northern Pintail*Anas acuta*

This common migrant and wintering duck species in the Puget Sound Lowlands uses more marine wetlands so it is unlikely to use the storm water ponds.

Cinnamon Teal*Anas cyanoptera*

This species is also an uncommon breeder in King County, a common migrant, but very rare in winter. It uses open water areas in the Puget Sound Lowlands (BBA Smith et al., 1997).

Canvasback*Aythya valisineria*

This species occurs in winter on large ponds and lakes and is common in MP in mid-winter (MH). It is unlikely to occur on the ponds regularly, but could occasionally.

Lesser Scaup*Aythya affinis***Greater Scaup***Aythya marila*

These two species are often difficult to tell apart, both are likely to use small ponds when they are in migration, but in winter, the Lesser is more likely to be seen on small ponds. They are less common at MP than the ring-necked duck (MH).

Ring-necked Duck*Aythya collaris*

This species uses small ponds for foraging, and is a rare breeder in western Washington (BBA Smith et al., 1997), and is uncommon in winter on freshwater ponds. Birds were observed in the spring of 2003 across the Sammamish River on the SR 520 ponds and on all 13 visits in the winter and spring to the ponds west of the RTC (MS) up to 6 birds.

Bufflehead*Bucephala albeola*

This species, like the Ring-necked duck, also uses small ponds for foraging is abundant in winter at MP (MH), and congregates in small flocks and is the most likely of the diving ducks to occur at open freshwater ponds. Seen on many occasions on the ponds west of RTC, up to 5 individuals in the spring and as late as 2 May 2004 (MS).

Common Goldeneye*Bucephala clangula*

This species is common in winter at MP (MH) but occurs more on Lake Sammamish than on small ponds. It was observed only once on the ponds west of RTC (MS) in January 2004.

Hooded Merganser *? MP*?*Lophodytes cucullatus*

This species has bred in King County (BBA Smith et al., 1997). It is also a common migrant, but uncommon in winter (2 birds were seen on 2 occasions in the winter of 2004 (MS). Like the Wood Duck, it typically requires tree cavities for nesting and could be encouraged to nest with boxes. A total of 5 birds were seen 27 May 2004 and one bird was observed to catch a fish. Birds have been seen at the Rowing Ponds at MP (MH) and and bird present 25 July 2002 (MH).

Common Merganser MP*?*Mergus merganser*

This summer breeder on streams and abundant migrant and wintering species is expected more along the Sammamish River than on the stormwater ponds, but could use the ponds if disturbed off the river by recreational boaters. Single birds were seen on 5 occasions into April on the ponds west of RTC (MS).

Osprey MP**Pandion haliaetus*

This species breeds in several areas in King County (BBA Smith et al., 1997), and is increasing in Washington. Osprey nest along Bear Creek on a cell tower along SR 520.

Bald Eagle MP**Haliaeetus leucocephalus***Federal/State Threatened Sp.
State PHS Species**

Eagles are also increasing in numbers and there is a nest nearby in Marymoor Park. There have been many eagle incursions into the Redmond heron colony and they are likely the cause of the nesting failure of 2004.

Sharp-shinned Hawk*Accipiter striatus*

This species is likely to occur as migrant and winter resident. Its presence in the summer is unlikely (BBA Smith et al., 1997). Since this species' diet is strictly passerine birds, the presence of many birds in the wetland woodland edge and with probable bird feeders at nearby houses, makes the site particularly likely for occurrence.

Cooper's Hawk *?*Accipiter cooperii*

Similar to the Sharp-shinned Hawk, but this species is more likely to be a breeding species, as it breeds in lowland sites in Puget Sound (BBA Smith et al., 1997). The isolation of the site may also increase its appeal as a breeding site, but it was only observed once in the winter of 2004 (MS) and has not bred at MP (MH).

Northern Harrier*Circus cyaneus*

Several individuals of this species apparently wintered at MP and were reported much more frequently prior to the construction of RTC, which reduced the total area for foraging significantly (MH, personal communication). Now it is observed occasionally and these are not overwintering individuals.

Red-tailed Hawk *? MP**Buteo jamacaiensis*

This resident of open space requires isolated woodlots for breeding. Red-tails nest in the isolated woods in MP (3 locations MH) as well as west of the Sammamish River and have been reported to use the open space area to be impacted by Alternative 1 (fide Patricia Thompson) and on almost every visit in the winter and spring (MS).

Merlin*Falco columbarius*

This species is a wintering species in King, where it hunts for small waterfowl, shorebirds and in urban areas passerines. Merlins do breed in the mountains of King County (BBA Smith et al., 1997), but not in the Lowlands. It is likely to be observed foraging in the open space west of the RTC Mall, but there is a large area in Marymoor Park that is also excellent foraging grounds. It is likely to be more impacted than the American Kestrel as the ponds may also provide good foraging habitat, but better mitigated ponds could provide a net increase in prey base.

Peregrine Falcon

Falco peregrinus

**Federal Species of Concern
State Sensitive Species**

Similar to merlin, but it is a nesting species of the rugged coast and concrete jungles in the area. It has occurred 16 times at MP or about 3% of visits.

American Kestrel

MP*

Falco sparverius

This small falcon of open space occurs on Marymoor Park and has bred in the area (BBA Smith et al., 1997). It is likely to be less impacted than the merlin as there is a large area in Marymoor Park that is also excellent foraging grounds. It was also impacted by the construction of RTC (MH, personal communication).

Ruffed Grouse

Bonasa umbellus

Ruffed Grouse are essentially gone from the Puget Sound Lowlands. There are no breeding records within miles of the site (BBA Smith et al., 1997) but a dead grouse was found in north Redmond during the spring of 2003 near Avondale. There are 3 records for the MP (MH).

California Quail

Callipepla californica

This resident species occurs in brushy open areas in Redmond Block but it is rare to occasional in MP, and now absent from the western portion of MP (MH), so it is likely to be absent from the open space west of RTC.

Virginia Rail **MP***

Rallus limicola

There are breeding records for both rails in King County (BBA Smith et al., 1997), but the edges of the mitigation ponds west of the RTC Mall may be too steep for this species.

Sora Rail

Porzana carolina

There are breeding records for both rails in King County (BBA Smith et al., 1997), but there have been only 2 records of this species at MP (MH), despite its detectability.

American Coot

Fulica americana

This species is seen on open water in Lake Sammamish, as well as on the Sammamish River, most common in migration or winter. It has been seen in winter on the ponds west of the RTC Mall (MS) but has not remained to breed at MP (MH).

Killdeer *?

MP*

Charadrius vociferus

As there are likely some open mudflat area in the Sammamish River basin area in late summer, this species is likely to occur then, but since it requires open space for foraging and nesting, nesting is not possible. This species was observed in several areas at RTC during the UW surveys in 2004, but not in the Open Space area and indicated breeding behavior.

Common Snipe

Gallinago gallinago

Snipe are in breeding habitat at the wetlands of the Kent Auburn area, but there is no documented breeding (BBA Smith et al., 1997) and only rarely occur in King County in summer (Hunn 1982). There are common in migration at MP (MH) but there are no records for June and July and only 3 from early May to late August. The wet meadows west of RTC are likely have some birds in migration and into winter.

Lesser Yellowlegs	<i>Tringa flavipes</i>
Solitary Sandpiper	<i>Tringa solitaria</i>
Western Sandpiper	<i>Calidris mauri</i>
Least Sandpiper	<i>Calidris minutilla</i>
Dunlin	<i>Calidris alpina</i>

Of all the migratory shorebirds, the Lesser Yellowlegs are the most likely to occur, and probably as a fall migrant (Paulson 1995). Shorebirds occur on mudflats so if the RTC stormwater ponds dry out in late summer when these birds would be expected as they were passing through. A total of 5 species have been observed at MP (MH) in late summer and early fall, with the exception of Dunlin, which has occurred in the winter.

Spotted Sandpiper *Tringa macularia*

This species breeds on rivers and lakes in Washington and there are probable breeding records in the core area for the site (BBA Smith et al., 1997). It is common in MP in July and August, likely after breeding and probably occurs on the Samammish River and the ponds west of RTC.

Glaucous-winged Gull *Larus glaucescens*

This common resident gull of the marine environment has acclimated to many urban areas and wanders into urban areas more in the winter than summer months, as documented in the area west of the RTC on 10 occasions in the winter and spring of 2004, with up to 4 birds in the winter period (MS). It is not clear whether adults occurring at inland sites breed there.

Mourning Dove *Zenaida macroura*

This is a rare to uncommon migrant at MP (MH) in the grasslands.

Band-tailed Pigeon *Columba fasciata* **State PHS Species**

This species occurs in mixed forest sites in western Washington, especially associated with edges, and it is also fond of red elderberry in the summer and madrone in the fall when the fruit are present. This is a WA state PHS species, and impacts to this species require management plans in many critical area ordinances (CAOs). There are possible breeding records in the core area for the site (BBA Smith et al., 1997), but the coniferous forest may be too small and isolated.

Barn Owl **MP*** *Tyto alba*

This species has bred at Marymoor Park at the Windmill and likely forages over the site, but also has a large area over Marymoor Park to forage. It has also decreased since the development of RTC to being observed on only 7% of visits in the spring and early summer at MP (MH).

Western Screech-Owl *Otus kennicottii*

Screech owls in western Washington are associated with wooded areas especially near streams or wetlands (Hunn 1982). There is little habitat associated with these small owls and none have been recorded at MP (MH).

Great Horned Owl ?* MP* *Bubo virginianus*

This species requires forest for nesting, but hunts in many urbanized areas, especially those with open areas. Large trees are acceptable for nesting as long as the site is not disturbed. Nesting begins late in winter. There are possible breeding records in the core area for the site (BBA Smith et al., 1997), but only one record for MP (MH).

Barred Owl *Strix varia*

This species has invaded the Pacific Northwest in the past 40 years, as a result of habitat openings in the forested areas. It now has bred in the Puget Sound Lowlands, and has occurred on the forested slopes immediately west of MP (MH).

Vaux's Swift MP* *Chaetura vauxi* State Species of Concern

The current status of breeding swifts in the lower elevation King County has not been confirmed (BBA Smith et al., 1997) but it occurs on over 50% of the summer visits to MP (MH). It has been observed breeding in chimneys in Tacoma (Dan Froehlich, pers comm) and birds have been seen in Redmond in late May, including over the ponds west of the RTC Mall on 27 May 2004. It has bred just SW of MP (MH).

Rufous Hummingbird *? MP* *Selasphorus rufus*

This species is an abundant migrant and possible summer breeder, using Indian Plum (*Oemleria cerasiformis*), honeysuckle (*Lonicera ciliosa*), thimbleberry (*Rubus parviflorus*) and twinberry (*L. involucrata*) flowers for nectar. There may not be enough nectar source in the woods or the open space area to maintain a breeding pair, but birds seen in May 2004 on 2 occasions could indicate breeding (MS).

Belted Kingfisher *Megasceryle alcyon*

Kingfishers are generally more common in winter than in summer, as this species requires a sandy bank for nesting by digging a tunnel, which are rare in the Puget Sound Lowlands except along some river banks and marine bluffs. Birds will travel long distances to forage. This species is common in MP every month (MH) and has been seen at the ponds west of RTC (MS).

Red-breasted Sapsucker MP* *Sphyrapicus ruber*

This resident species is associated with riparian and wetland areas and though it is not a common species, has bred in the area around MP (BBA Smith et al., 1997). It is a quiet species, so it is often not detected. Retention of snags is critical for this species.

Downy Woodpecker ?* MP* *Picoides pubescens*

This resident breeding species (BBA Smith et al., 1997) is the most likely species encountered in deciduous forests, so it is unlikely on the open space area, but possible in the coniferous forest. Retention of snags is critical for this species. Single birds were seen on 10 occasions west of the RTC from winter to spring 2004 (MS).

Hairy Woodpecker MP* *Picoides villosus*

This resident breeding species (BBA Smith et al., 1997) is more associated with coniferous forest than the Downy Woodpecker. It is seen throughout the year in MP (MH) but was

observed on only 1 visit near the ponds west of RTC, associated with the Douglas fir forest, in May 2004.

Northern Flicker *? MP* *Colaptes auratus*

This species is a resident breeder in the core area for Redmond (BBA Smith et al., 1997) is more common in migration and winter than in summer. It is also likely to occur in the open space west of the RTC, as this species often feeds on ants on the ground. The presence of snags in the wetlands make this species likely to be encountered, especially in migration and winter.

Pileated Woodpecker

Dryocopus pileatus

State Species of Concern

This species is a resident probable breeder in the core area for Redmond (BBA Smith et al., 1997) but there are no large enough trees in the coniferous forest for nesting and few snags. It is a rare to occasional visitor to MP (MH).

Olive-sided Flycatcher

Contopus borealis

This Neotropical migrant summer breeder in western Washington is associated with upper canopy openings in coniferous forests. Its call can be heard from a great distance but observations are few. There are few nesting records for the Puget Sound Lowlands of King County and it is probable species for the core Redmond areas (BBA Smith et al., 1997), but only a few records from MP (MH).

Western Wood-Pewee MP*

Contopus sordidulus

This Neotropical migrant summer breeder in western Washington is associated with open coniferous and deciduous habitats. It is listed as core habitat in coastal King County (BBA Smith et al., 1997). It is common in summer at MP (MH). It was observed at the RTC UW bird surveys in May along Bear Creek (DMN).

Pacific-slope Flycatcher

Empidonax difficilis

This Neotropical migrant summer breeder in western Washington is associated with open coniferous forests with deciduous understory, and is an abundant breeder in many areas, but is only occasional in summer at MP (MH) due to lack of coniferous forest.

Willow Flycatcher *? MP*

Empidonax trailii

This Neotropical migrant is a common summer breeder in western Washington is associated with the edges of many riparian areas and also occurs in many clear cuts. This species has bred in King County (BBA Smith et al., 1997), and it has been heard calling in the open brushy habitat south of the ponds west of the RTC Mall on 27 May 2004. It is also an abundant species in migration and would occur then.

Dusky/Hammond's Flycatcher

Empidonax sp.

It is very difficult to distinguish these two species apart in migration, which is when they would be expected to be observed. The Dusky Flycatcher is observed in migration, and the coniferous forest area is the likely location as they occur almost exclusively in that habitat.

Northern Shrike

Lanius excubitor

This winter visitor is uncommon to occasional at MP (MH) and would be expected at the open space areas around the stormwater ponds, but only rarely.

Hutton's Vireo

Vireo huttoni

This is a resident species in western Washington, associated with mixed coniferous-deciduous forest and is an uncommon breeder in King County (BBA Smith et al., 1997). It is often not recorded during the June BBS surveys because it sings more in early spring and nests as early as March. It is quite retiring in habit when not singing and is therefore not observed, and is often mistaken for the abundant ruby-crowned kinglet. There are 2 records for MP (MH).

Western Warbling-Vireo MP*

Vireo swainsonii

This Neotropical migrant is an uncommon summer breeding vireo in western Washington, where it nests in deciduous woodlands (BBA Smith et al., 1997) preferring cottonwoods. It was heard singing in May 2004 on the UW bird surveys along Bear Creek s of RTC. It is a common migrant in MP, but only occasional in summer (MH).

Cassin's Vireo (previously Solitary Vireo) *Vireo cassinii*

This is a Neotropical migrant that breeds in deciduous forest, but is more abundant in the oak-pine forests in eastern Washington and is less common than the warbling vireo in sites like fir forest. It has not been confirmed breeding on the lowlands of King County (BBA Smith et al., 1997) and has only been recorded 8 times at MP (MH).

Steller's Jay *

Cyanocitta stelleri

This is a common resident of coniferous forest has adapted well to suburban areas.

American Crow * MP*

Corvus brachyrhynchos

There remains some nomenclature indicating there are two crows species, with the coastal Northwestern Crow, common in flocks along the coast, breeding colonially, and feeding along the tideline, being the "species" occurring along the northwest coasts. There is a good possibility that this species could have bred at the Wetlands, or in the conifers adjoining the Wetlands.

Northern Rough-winged Swallow *Stelgidopteryx serripennis*

This species breeds in areas where there are sandy banks for nesting holes. It has been seen at the mouth of Bear Creek (MH) in May 2004.

Violet-green Swallow *? MP*

Tachycineta thalassina

This species commonly breeds in urban areas in buildings, so although it is unlikely to be breeding at the site, it has been seen feeding over the ponds west of the RTC Mall.

Barn Swallow *? MP*

Hirundo rustica

This species commonly nests in urban buildings especially where there is open area for insects, so although it is unlikely to be breeding in the forested area, it is regularly observed feeding over the ponds west of the RTC Mall.

Cliff Swallow

Hirundo pyrrhonota

It is not known how close this species breeds to the site, as it requires some structures like bridges or large open-faced buildings for nesting, so it is not expected to breed at the proposed sites, but likely occurs over the ponds west of the RTC Mall

Tree Swallow *? MP*

Tachycineta bicolor

This is the only species that might breed on the wetland site, however, nesting limited by the lack of nesting holes. Birds were observed in May 2004 on 2 occasions (MS) but no evidence of breeding was detected. Closest box with breeding birds is just south of SR520 (MH).

Black-capped Chickadee * MP* *Parus atricapillus*

This is a common resident in western Washington forests. Juveniles have been observed in the forest area.

Chestnut-backed Chickadee * *Parus rufescens*

This resident species prefers more coniferous habitat for foraging, but often nests in open habitats, and is a common breeder in King County (BBA Smith et al., 1997). Young begging food were observed indicating local breeding.

Common Bushtit * MP*

Psaltiriparus minimus

This common resident species of the Puget Sound Lowlands is typically associated with human dominated landscapes but certainly make use of wetlands. A nest was next to the Workshop Tavern in 2003.

Red-breasted Nuthatch *? MP* *Sitta canadensis*

This common resident species occurs in almost all wooded habitats in western Washington (BBA Smith et al., 1997) and is likely a breeder at the site.

Brown Creeper *?

Certhia americana

This common resident species of coniferous forest in western Washington (BBA Smith et al., 1997) and was detected singing at the Safeco Woods on 20 June 2004 so it may be breeding on the site despite the lack of snags.

Marsh Wren *? MP*

Cistothorus palustris

The Sammamish River contains appropriate grasses for marsh wren nesting and the species was observed not only in the breeding season, but in the winter. This species remains common in MP throughout the winter and is abundant in summer (MH).

Bewick's Wren *

Thryomanes bewickii

This common resident species of western Washington is associated more with brushy areas than deeper coniferous forests, but the mixed forests at the site are used (BBA Smith et al., 1997).

Winter Wren *?

Troglodytes troglodytes

This is a common resident species of well vegetated coniferous forest floor in western Washington (BBA Smith et al., 1997). In migration and winter it utilizes a variety of shrubby habitats in the Puget Sound Lowlands, and is likely to be present in wetland vegetation,

especially during freezing weather. Birds were heard singing in April 2003 and 2004 at the Safeco coniferous forest but it is unlikely they stay to breed. Birds breed west of Lake Sammamish on the upper hillsides (MH).

Varied Thrush

Zoothera naevia

This common resident species of coniferous forest does not breed in lowland King County (BBA Smith et al., 1997) but is observed in the Puget Lowlands in late fall and winter it occurs in deciduous habitats, including forested wetlands, and the wetlands play an important role for winter cover and forage during rare winter storms, when hundreds of varied thrushes can be observed foraging on litter under wetland deciduous trees.

Swainson's Thrush MP*

Catharus ustulatus

This is an abundant summer breeding thrush in the Puget Lowlands in forested habitat (BBA Smith et al., 1997), along with the American Robin. This species disappears in the winter. This species breeds in MP (MH) but is not likely to breed in the current coniferous forest or the narrow riparian areas around the stormwater ponds west of RTC, but occurs in migration as observed in May 2004 (MS).

Hermit Thrush

Catharus guttatus

This species is an abundant migrant and uncommon wintering thrush in the Puget Sound Lowlands, where it uses the litter area under wetland deciduous trees for foraging and cover, and uses coastal wetland areas during cold periods.

American Robin * MP*

Turdus migratorius

An abundant adaptable open space and woodland breeding summer resident in Puget Sound, with differing subspecies appearing in migration and in winter (Hunn, 1982). This is one of the most abundant species in all forested habitats.

Ruby-crowned Kinglet

Regulus calendula

This is an abundant migrant and wintering species in the Puget Lowlands, occurring in a wide variety of habitats, including forested areas. Birds were observed in March 2003 in the forested areas by the Workshop Tavern.

Golden-crowned Kinglet *? MP*

Regulus satrapa

This abundant coniferous forest resident is an abundant breeder in King County (BBA Smith et al., 1997), and is commonly heard on all coniferous forests. During the winter, especially in cold weather, it is known to forage in non-coniferous habitats. Birds were heard singing in May 2004 in on the UW Surveys by Leary and Bear Creek Parkway

Cedar Waxwing *? MP*

Bombycilla cedrorum

This is a common breeding species in the Puget Sound lowlands, rare in winter (Hunn, 1982; BBA Smith et al., 1997). Birds are common in wetland habitats, but avoid more closed forested habitats. It is attracted to the large berry crops. Birds seen in April 2004 on 2 occasions were very early (MS).

European Starling * MP* *Sturnus vulgaris*

This species was introduced into eastern North America in the late 1800's, and the first starlings occurred in Washington in 1945, and by 1956 winter roosts in the thousands were seen in Seattle (Hunn, 1982). It breeds generally in human associated habitats, though it will occupy appropriate sized nesting holes. It is actually not a species that uses forests much, but large flocks are seen in agricultural and estuaries nearby.

Orange-crowned Warbler *Vermivora celata*

This Neotropical Migrant is a common breeding warbler in brushy habitat, breeds in King County (BBA Smith et al., 1997), and is an abundant migrant. It occurs in brushy habitat in forested area like the forest adjacent to the proposed project.

Yellow Warbler *? MP* *Dendroica petechia*

This Neotropical Migrant is a very common bird in willows and wetland vegetation in western Washington, and has shown declines in the BBS. It is a confirmed breeder in Redmond Block (BBA Smith et al., 1997) and likely on the stormwater ponds, but has not been confirmed. It was heard singing in May 2004 on the UW bird surveys along Bear Creek s of RTC.

Yellow-rumped Warbler *? *Dendroica coronata*

This species is an abundant migrant in the Puget Sound Lowlands and was recorded at the Safeco woods on the April 2004 UW bird surveys. It has bred in Redmond Block (BBA Smith et al., 1997) but it has not been recorded in summer there.

Black-throated Gray Warbler *Dendroica nigrescens*

This Neotropical Migrant is listed as a breeding species in King County (BBA Smith et al., 1997), where it uses mature riparian but prefers coniferous forest. It may be heard singing in migration but that does not indicate breeding. It is surprisingly rare at MP (MH).

Townsend's Warbler *Dendroica nigrescens*

This species is a rare wintering species and uncommon migrant. It uses a variety of habitats and would be enhanced with the planting of more native trees at the Safeco Woods, especially madrone.

MacGillivray's Warbler *Oporornis tolmiei*

This Neotropical Migrant breeds in eastern King County, but the Puget Sound Lowlands are not listed as core habitat (BBA Smith et al., 1997). It has only been recorded 4 times at MP, all in migration (MH).

Common Yellowthroat *? MP* *Geothlypis trichas*

This common Neotropical Migrant is an likely migrant in the forest and in the wetlands adjacent to the site. Though it is surprisingly adaptable to a variety of habitats, forests are not utilized unless adjacent to wetlands. Birds were heard singing along Bear Creek on 2004 UW Surveys.

Wilson's Warbler*Wilsonia pusilla*

This is one of the most likely encountered warbler in forested areas in migration. It sings in migration, on into June, but breeds in more mature forests with conifers than the Redmond heron colony site. It is also listed as a declining species in the BBS in WA.

Bullock's Oriole *? MP**Icterus bullockii*

This species has become rare in western Washington where it occurs in deciduous habitats, especially cottonwoods foraging high in the trees. This species breeds at MP (MH) but requires larger trees than currently occur along the Sammamish River west of the RTC.

Red-winged Blackbird * MP**Agelaius phoeniceus*

This species occurs on the edges of ponds and other wetland areas and will congregate on the edges of the forested area. It also occurs in migration at upland sites. Up to 12 birds were detected in January 2004 (MS), as well as birds into the spring and summer of 2004 (MS and DMN, UW Bird Surveys).

Brewer's Blackbird *?*Euphagus cyanocephalus*

This is a common species in agricultural areas in Redmond Block and may associate with the open space area, but appears to prefer parking lots and other developed areas over natural areas. This species appears to have acclimated to urban areas, but its breeding biology in those areas has not been investigated.

Brown-headed Cowbird * MP**Molothrus ater*

This species is abundant in the Puget Lowlands in the summer especially in farmed and open areas, where it forages. It is an important species because it parasitizes many nests of Neotropical Migrants, but the rates of parasitism are not known for many Washington state species of concern. It has been observed on the site and it is likely that many of the species nesting in the forest are parasitized.

Western Tanager*Piranga ludoviciana*

This Neotropical Migrant species is associated with coniferous forest in the Puget Sound Lowlands, and is a common breeder in such habitats in King County (BBA Smith et al., 1997), and has bred on Redmond Block, but not likely in the deciduous forest MP. It is a common migrant but is rare in summer at MP (MH).

House Sparrow **Passer domesticus*

This abundant semi-domesticated species nests near all human activities, and would be expected to be seen on roads and yards adjacent to the site. It might occasionally be observed in the open space area, especially when water is not available in late summer.

Pine Siskin *? MP**Carduelis pinus*

This abundant resident species, occurring more at higher elevations, is a breeder in King County but its status in the Puget Sound Lowlands is not well known (BBA Smith et al., 1997). In migration and winter, it occurs in flocks in all forested areas, especially in riparian deciduous forests, but it was only been observed on 2 occasions in April 2004 (MS).

American Goldfinch *? MP* *Carduelis tristis*

This resident of the Puget Sound lowlands becomes abundant in May when additional migrants arrive. It breeds in open fields often later in the year and is a common breeder in King County (BBA Smith et al., 1997). In migration and the winter, it occurs in many forested areas, seeking seeds and catkins of deciduous species. Often in the accompaniment of the Pine Siskin. Seen in April and May (MS).

Purple Finch *Carpodacus purpureus*

This is the resident finch of coniferous forest edge, but it has declined as the house finch has invaded the human dominated landscapes in the past 60 years (Hunn, 1982). It has not been confirmed as a breeder in the Redmond Block (BBA, Smith et al 1997) but occurs frequently in other seasons at MP (MH). It was observed once in the conifer forest west of RTC (MS).

House Finch *? MP* *Carpodacus mexicanus*

This species has expanded its range into the Pacific Northwest, and now occurs in all areas associated with human activity. It is likely to be breeding in close proximity to houses and the juveniles are known to use wetlands for foraging, especially thickets of Himalayan blackberry.

Red Crossbill *Loxia curvirostra*

This common resident of the coniferous forest wanders widely in the Puget Sound lowlands and it is generally recorded flying overhead. It is likely to be seen in doug firs on the edges of Sammamish River. It has not been recorded at MP (MH).

Evening Grosbeak *Hesperiphona vespertina*

Though this species breeds in King County (BBA, Smith et al 1997), it is mostly observed flying overhead, or seen feeding on seeds and catkins of deciduous trees, some of which occur on Sammamish River. It is known to feed on ash samaras, so it may occur in early summer where they occur.

Song Sparrow * MP* *Melospiza melodia*

This is a common resident of brushy habitat and is a common breeder in King County (BBA, Smith et al 1997).

Lincoln's Sparrow *Melospiza lincolnii*

This species may breed in the mountains of King County (Hunn 1982) and is a common migrant and rare winter resident in the Puget Sound Lowlands, where it prefers open grassy wet areas.

Savannah Sparrow * MP* *Passerina sandwichensis*

This species is an abundant breeder at MP (MH) in grassy areas and was observed on the UW surveys in the Bear Creek Parkway area.

Fox Sparrow *Passerella iliaca*

This species breeds in the mountains of King County (Hunn 1982). It is a common winter resident, most abundant in salal in the winter, but it also occurs in brushy areas and wetlands, using evergreen blackberry. Since there is little salal in the forested area, it may occur sporadically on the site and has not been confirmed. It definitely occurs during migration.

White-crowned Sparrow * MP* *Zonotrichia leucophrys*

There are several White-crown subspecies in western Washington, one present only in the summer in Puget Lowlands (*pugetensis*) as an abundant breeder in variety of field and shrubby habitats, but several other subsepcies are common migrants and uncommon winter residents, and just as the Golden-crowned Sparrow, likely occur on the open space site.

Golden-crowned Sparrow *Zonotrichia atricapilla*

This is an abundant migrant and common winter resident in western Washington, and is more of an upland brushy habitat species than a forested wetland species. This species may occur on more of the upland brushy edges, but the forested wetlands are not the typical habitat for this species. Freezing weather likely concentrates these birds in sites like the Redmond colony. It was observed on 2 occasions in the winter, with up to 10 birds observed (MS).

Dark-eyed Junco * MP* *Junco hyemalis*

This is a resident common species of coniferous forest edge and an abundant winter resident in western Washington, using a variety of edge habitats. In many areas in the Puget Sound Lowlands it disappears in the summer and its status at Redmond as a breeder is unlikely, but it breeds in the Redmond Block (BBA Smith et al., 1997) and juveniles have been seen near the Workshop Tavern in early summer.

Rufous-sided Towhee * MP* *Pipilo erythrophthalmus*

This is a resident common species of brushy habitat (BBA Smith et al., 1997). Towhees use edges of the coniferous forest and were heard on the 2004 UW bird surveys.

Black-headed Grosbeak MP* *Pheucticus melanocephalus*

This Neotropical Migrant breeding species is confirmed as a breeder in King County and in the Redmond block (BBA Smith et al., 1997) and MP (MH). It occurs in mixed deciduous forests but not generally open space areas. Increasing deciduous trees in the Safeco Forest will increase its occurrence.

Mammals

No mammals other than the non-native eastern gray squirrel have been observed on the site. Of particular importance on the grasslands in the open space is the presence of voles (*Microtus* sp.) that serve as winter food for herons and many birds of prey, but no surveys have been performed to determine if they still occur on the site after its isolation from Marymoor Park by SR 520 and the construction of RTC. It is likely that the abundance of voles, if present in the open space, is more sporadic, as their isolation might cause an increase in extinction and a decrease in immigration. It is likely that muskrat and even beaver occur on the pond sites as they move down Bear Creek, but their continued presence is doubtful due to the lack adequate habitat.

Virginia opossum *Didelphis marsupialis*

This species is introduced and has rapidly become adapted to living in many urban areas. It is not a welcome visitor to gardens and eats bird eggs.

Moles

It is likely there are moles on the site but the species has not been confirmed whether it is the coast mole (*Scapanus orarius*) or the Townsend Mole (*Scapanus townsendii*).

Little Brown Bat

Myotis luciphugus

WA Priority Species

Yuma Myotis

Myotis yumanensis

WA Priority Species

Silver-haired Bat

Lasionycteris noctivagans

Big Brown Bat

Eptesicus fuscus

Hoary Bat

Lasiurus cinereus

It is likely that bats occur on the site, with little brown bat and Yuma myotis being the most likely, but with the presence of the coniferous forest, there could be some of the larger and more forest associated bats present.

Rabbits

It is likely that there are rabbits on the site, likely one of two introduced species, either the eastern cottontail (*Sylvalagus floridanus*) or the domestic rabbit (*Oryctolagus cuniculus*).

Eastern Gray Squirrel

Sciurus carolinensis

This introduced species is prevalent all throughout Redmond, and has become a pest in many gardens and also eats the eggs of many native bird species.

Chickaree (Douglas squirrel)

Tamiasciurus douglasii

This is the small vocal squirrel of the coniferous forest of the NW, it has typically been driven out of urban areas by the lack of habitat and competition from eastern gray squirrels.

Beaver

Castor canadensis

This species is very likely to wander down Bear Creek and along the Sammamish River.

Dusky-footed wood rat

Neotoma fuscipes

It is not known if this species occurs in the area.

Voles

Microtus sp.

There have been no surveys to determine which of the three species that occur in the region long-tailed meadow mouse (*Microtus longicaudus*), the Oregon meadow mouse (*Microtus oregoni*), or the Townsend Meadow mouse (*Microtus townsendii*), or some combination occur.

Long-tailed weasel

Mustela frenata

This species has been observed at MP (MH).

Coyotes

Canis latrans

This species has adapted well to urban areas, even occurring in urbanized Seattle.

Mink

Mustela vison

This species is associated with water areas and will often predate waterfowl, but also fish, crawfish, frogs, and mammals up to the size of muskrats. This species is very likely to wander down Bear Creek and along the Sammamish River.

Raccoon

Procyon lotor

This species has adapted well to urban areas, even occurring in urbanized Seattle.

River otter

Lutra canadensis

This species is very likely to wander down Bear Creek and along the Sammamish River.

Amphibians and Reptiles

Surveys from 1995 to 1997 in Evans Creek at Marymoor Park found Bullfrog, long-toed salamander, Pacific Tree frog and Northwest salamander (Richter and Ostergaard 1999). No other information is available. It is not known if the water quality and quantity in the storm water ponds allow the survival of egg masses, as the fluctuating levels in many ponds dessicates many egg masses.

Pacific Tree Frog

Hyla regilla

The most abundant frog in the forested areas, likely occupying the RTC stormwater ponds after coming down Bear Creek.

Red-legged Frog

Rana aurora

Should occur on more pristine or relic ponds, and possibly occupying the stormwater ponds at RTC as it comes down Bear Creek.

Bullfrog

Rana catesbiana

This large introduced frog is taking over many of the stormwater ponds and lakes in King County. It is likely to have a competitive or predatory impact on other amphibians.

Northwest salamander

Ambystoma gracile

Occurs east of Lake Sammamish but its status at MP is unknown.

Long-toed Salamander

Ambystoma macrodactylum

Most common salamander and likely to occur in the stormwater ponds.

Western toad

Bufo boreas

**Federal Species of Concern
State Candidate Species**

Occurs in drier sites in the Puget Lowlands, but no records for MP.

Common Garter Snakes

Thamnophis sirtalis

This is the most common snake, highly variable with 3 subspecies in King County but its status at MP is unknown.

Northern Alligator Lizard

Gerrhonotus coeruleus

Possibly occurring inland at drier rocky sites, but its status in the area is unknown.

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